

DEVAL L, PATRICK GOVERNOR TIMOTHY P. MURRAY LIEUTENANT GOVERNOR JUDYANN BIGBY, MD SECRETARY JOHN AUERBACH

COMMISSIONER

The Commonwealth of Massachusetts

Executive Office of Health and Human Services
Department of Public Health
William A. Hinton State Laboratory Institute
305 South Street, Jamaica Plain, MA 02130

01/26/2012

Larry Bates
Assistant District Attorney, Suffolk County

Dear ADA Bates,

Enclosed is the information you requested in regards to Commonwealth vs. Included are copies of the following:

- 1. Curriculum Vitae for Annie Dookhan and Kate Corbett.
- 2. Drug Analysis Laboratory Receipt.
- 3. Control Cards with analytical results for samples #

4. Analysis sheets with custodial chemist's hand notations and test results.

5. GC/Mass Spectral analytical data for samples #

Annie Dookhan was the custodial chemist and performed the preliminary testing and net weight for this sample. Kate Corbett analyzed the GC/MS data for this sample.

If you have any questions about these materials, please call me at the number below.

Annie Dookhan

Chemist

Sincerely.

Drug Analysis Lab

Jamaica Plain, MA. 02130

(617) 983-6622

Khan, Annie (DPH)

From:

Khan, Annie (DPH)

Sent:

Thursday, January 12, 2012 12:12 PM

To:

Bates, Larry (SUF); Corbett, Kate (DPH)

Subject: RE: Lab Notes and Summons BMC Docket Number

Hi Larry,

Hope this email finds you well.

Upon reviewing this case, the Lab#s may be incorrect.

At your convenience, could you please check if these are the correct Lab#s?

Sorry for the inconvenience.

Thanks.

Annie Drug Analysis Lab 617-983-6622 (work) 617-983-6625 (fax)

From: Bates, Larry (SUF)

Sent: Wednesday, January 11, 2012 2:58 PM To: Khan, Annie (DPH); Corbett, Kate (DPH)

Subject: Lab Notes and Summons BMC Docket Number

case

Greetings Once More

Attached please find a summons for your appearance on the above given case at BMC for Feb 15. Request is also made for you forward a copy of lab notes for case number and should you not be able to attend the court date, please notify me. Lastly, thank you for your assistance.

Larry Bates

Lab#

case

Process of

Curriculum Vitae

Annie Khan (Dookhan)

Education:

University of Massachusetts, Boston, Ma, Master of Science in Chemistry

University of Massachusetts, Boston, Ma, Bachelor of Science

Major: Biochemistry Minor: Economics

Experience:

2003 - present

Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

- *Responsible for the identification of illicit drugs to determine violations of harmful and narcotic drug laws.
- *Writing of the Standard Operating Procedures (SOPs) and Protocols.
- *Responsible for the Quality Control and Quality Assurance of analytical instruments, reagents and controls/standards.
- *Maintenance and repairs of analytical instruments.
- *Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.
- *Qualified as an expert witness in Massachusetts Courts and U.S. District Court.
- *Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.
- *Appointed Assistant Analyst by Assistant Commissioner of Public Health.
- *Notary Public.

2001 - 2003

QC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

- *Completed proficiency training conducted by a member of the staff within the MBL Quality Control and Quality Assurance Department for the Food and Drug Administration.
- *Method Development for creating new techniques for the QC Dept. and FDA.
- *Writing, revising and reviewing the Standard Operating Procedures (SOPs).
- *Trained and supervised new chemists and interns for the department.
- *Routine QC testing of products for the FDA.
- *Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.
- *Calibration, preventive maintenance, QC and QA of analytical instrumentation.
- *Complete testing of chemicals for Vendor Validation Project for the FDA.
- *Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

Additional Courses:

Department of Justice - Forensics Professionals

Introduction to Forensic Drug Chemistry

Chemical Spot Test and Mechanism for Illicit Drugs

Forensic Mass Spectrometry

Forensic Science 101: An Introduction

Fundamentals of Forensic Questioned Documents

Perspectives in Expert Testimony

Evidence Analysis

Ethics in Forensic Science

Transition to Leadership

Fundamentals of Forensic Toxicology

Additional Trainings:

Good Laboratory Practice/Good Manufacturing Practice (GLP/GMP) training with Massachusetts Biologic Laboratory.

Quality Control/Quality Assurance (QC/QA) training according to FDA Codes and Regulations.

Gas Chromatography (GC) and Gas Chromatography/Mass Spectrometry (GC/MS) trainings with Agilent Technologies and Restek.

High Power Liquid Chromatography (HPLC) and HPLC/MS/MS trainings with Waters Cooperation.

Fourier Transform Infrared Spectroscopy (FTIR) training with Spectros and Spectum One.

Ultraviolet-Visible Spectroscopy (UV-Vis) training with Agilent Technologies and Beckman.

Total Organic Carbon Analyzer (TOC) training with MBL and Sievers.

Associations:

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)

Curriculum Vitae

Kate A. Corbett

Education

Bachelor of Science Degree, CHEMISTRY May 2003 MERRIMACK COLLEGE

Coursework included: Organic Chemistry, Inorganic Chemistry, Quantitative Analysis, Instrumental Analysis, Physical Chemistry, Physics, Calculus

Employment

Chemist II State Laboratory Institute (March 2008-Present)

Massachusetts Department of Public Health

Drug Analysis Laboratory

- Responsible for the identification of substance and trafficking substances to determine violation of the Massachusetts drug laws
- Responsible for the identification of pharmaceuticals to determine violation of the Massachusetts drug laws
- Operate analytical instrumentation, microscopes and balances for forensic drug analysis

Chemist I State Laboratory Institute (2005-March 2008)

Massachusetts Department of Public Health

Drug Analysis Laboratory

- Responsible for the identification of substance to determine violation of the Massachusetts drug laws
- Operate analytical instrumentation for the purpose of performing forensic drug analysis
- Successfully completed an eight week training course in the analysis of drugs conducted by senior staff of the Department of Public Health, Drug Analysis Laboratory
- Appointed an assistant analyst for the Department of Public Health, Drug Analysis Laboratory in 2005.

Research Associate (September 2003 – August 2005)

SENSOR TECHNOLOGIES, INC - Shrewsbury, MA

- Prepared chemistries used in making sensor beads
- > Generated and examined sensors employing fluorescence spectroscopy
- Performed protein, dye and sugar assays using UV/VIS spectrophotometry
- > Carried out titrations on ricin using fluorescence correlation spectroscopy
- Statistical analysis of experimental data

Intern (March 2003 – August 2003)

MASSACHUSETTS STATE POLICE CRIME LABORATORY - Sudbury, MA

- Assisted in the gathering of case files to fulfill the National Institute of Justice's No Suspect Backlog Reduction Grant
- Observed in the Evidence, Criminalistics, DNA, Drug, Trace, Toxicology, and Bomb/Arson Units

BOSI DRUG REG	CEIPT	D	FE	P	(a)	N R	T T	G E	
					.,				

Dacker Dalle	CC#					
BOSICIE DE PARTMENT	воо	K#67				
DRUG RECEIPT	PAGE #					
	DES	TRUCTION #				
District/Unit D-4 DCO						
Name & Rank of Arresting Officer 591. Det.	Ke	enan	ID# 1063	; Z		
DEFENDANT'S NAME	ADD	RESS	CITY	STATE		
			Boston	MB.		
			Boston	MA		
	-		LAB US	E ONLY		
DESCRIPTION OF ITEMS SUBMITTED	WHITE ARGONAL ACTOR AS A STATE AS	GROSS QUANTITY	GROSS WEIGHT	ANALYSIS NUMBER		
hite rock (crack cocaine)		2 plus	42/0			
) I de la company			2000			
ite pills (800 mg Gabapentin)		40 pills	1 00/2/q	-		
powder (Heroin)		46 G/B'S	57,890			
, ,	Transition as a contract of the contract of th	,		Polarense (California)		
				MARKEN, IANGO, A.		
•						
		A				
			A STATE OF THE STA	And the state of t		
		Chiadoria de como mento como como como como como como como co				
To be completed by ECU personnel only		/ 1	•			
Name and Rank of Submitting Officer	4	Shile	ID#//@	<u>H</u>		
Name and Rank of Submitting Officer Sypul			ID#	3-11		
			ECU Control #			

Date Analyzed: < City: Boston D.C.U. Police Dept. Officer: P.O. SYBIL WHITE Def: Subst: SUB Amount:

No. Cont: Cont: pb 2 Date Rec'd: 02/03/2011

No. Analyzed: \

4.36 Gross Wt.:

1

Net Weight: 0.16

Tests: 6 ASS

Prelim: cocurre

Findings:

Date Analyzed: 03-26-11

City: Boston D.C.U. Police Dept.

Officer: P.O. SYBIL WHITE

Def: Amount:

40.0 1

Cont: pb

Date Rec'd: 02/03/2011

No. Cont:

Gross Wt.:

20.29

No. Analyzed:

Net Weight:

#Tests: IA TL

Subst: TAB

Prelim: E

Findings: 96/2000

City: Boston D.C.U. Police Dept.

Date Analyzed:

Officer: P.O. SYBIL WHITE

Def:

Amount:

Cont: gb

Subst: SUB

No. Cont:

46 Date Rec'd: 02/03/2011

No. Analyzed: 5

Gross Wt.:

57.89

Net Weight: 0.86

Tests: 25 AS D • (0 KAC

Prelim: 17 enous

DRUG POWDER ANALYSIS FORM

SAMPLE#	AGENCY BOE	SAO ANALYST	A39
No. of samples tested:	_	Evidence Wt.	
PHYSICAL DESCRIPTION:		Gross Wt(2): _ ص	
Off White chu	1 5 6p2		0.2
		Net Wt:	0.1646
PRELIMINARY TESTS Spot Tests		Microcrystalline Tes	sts
Cobalt Thiocyanate <u>(─) </u> \	_	Gold Chloride <u>+</u>	
Marquis	-	TLTA (-) +	- Ar
Froehde's Mecke's	<u>.</u>	OTHER TESTS	
PRELIMINARY TEST RESULTS		GC/MS CONFIRMATORY	/ TEST
RESULTS COCAMO	-	RESULTS COCCUS	
DATE 2-8-11	· .	MS OPERATOR KOC	
		DATE 1-10-1	1

DRUG POWDER ANALYSIS FORM

SAMPLE #	AGENCY BOSPO. ANALYST POO
No. of samples tested:	Evidence Wt.
PHYSICAL DESCRIPTION:	Gross Wt ():
40 while	0001 +05et Gross Wt ():
	ト
	Net Wt: 51.2238
प्रमप्पप	800
PRELIMINARY TESTS Spot Tests	Microcrystalline Tests
Cobalt Thiocyanate ()	Gold Chloride
Marquis	TLTA ()
Froehde's	OTHER TESTS
Mecke's	Minimala 9118)
PRELIMINARY TEST RESULT	GC/MS CONFIRMATORY TEST
RESULTS GASA PEDAS	RESULTS
DATE 3-26-11	
	DATE

Drug Information

DRUG NAME: GABAPENTIN

INGREDIENTS: GABAPENTIN - 800 MG

Color: White Shape: Oval

Imprint: 4444 The tablet is debossed with a hourglass logo and 4444 on one side and 800 on the reverse side., Hourglass 4444 800 The tablet is debossed with a hourglass logo and 4444 on one side and 800 on the

reverse side., 800
Form: Oral Tablet

Available-Container-Size: Bottle of 100, Bottle of 500, Strip of 100, Bottle

of 1000

AAPCC Code: 077730 - Other Types

of Anticonvulsant (Excluding

Barbiturates)

NDC: 0093-4444-01 0093-4444-05 0172-4444-60 0172-4444-70 0172-4444-10

Excipients: Lactose (Monohydrate); Cellulose,

Microcrystalline; Polyethylene Glycol

Regulatory Status: RX
Availability: United States

Product ID 6738350

Contact: Teva Pharmaceuticals

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DRUG POWDER ANALYSIS FORM

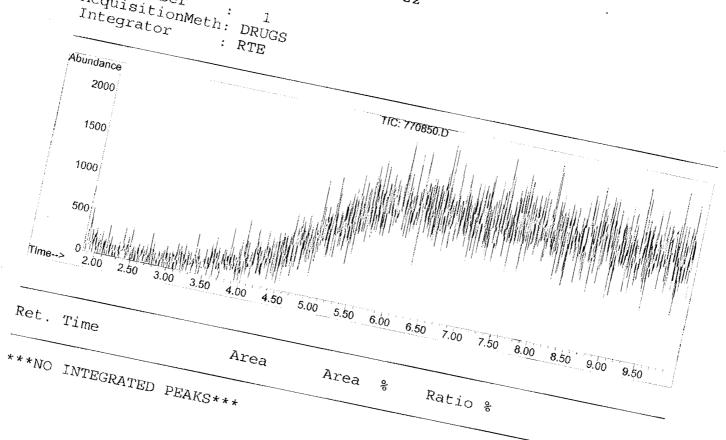
SAMPLE # AGEN	ICA BOBAO		ANALYST	A37
No. of samples tested:		Ev	idence Wt.	<u> </u>
HYSICAL DESCRIPTION:		Gross	s Wt (45):	9.7000
_				
Beige powdred sus		Gross	s Wt (5):_	1-0902
1746	800		Pkg. Wt:	
)		Net Wt:	
ido subsit -> uc	2+ mordhed.			
	•	•		
PRELIMINARY TESTS		Microcon	votallina Tac	sia.
Spot Tests			<u>ystalline Tes</u>	<u> </u>
Cobalt Thiocyanate (+)	C	Gold Chloride		
Marquis +		TLTA (1	***************************************

Froehde's +		<u>01H</u>	ER TESTS	
Mecke's	50	÷C+		·
	PATRICAL CONTRACTOR		4	
		***************************************		·
PRELIMINARY TEST RESULTS	<u> </u>	MS CON	FIRMATOR)	<u>/ TEST</u>
RESULTS LONON	RE	SULTS	Hero	
DATE 2-08-11		MS		
	OPER	ATOR	ادمد	
		DATE	0-16-1	

Revised 7/2005

#	Gross Weight	Packet Weight	Net Weight	#	Gross Weight	Packet Weight	Net Weight
1	0.2187	0.1957	0.0180	26			
2	0.2143	0.2007	0.0136	27			
3	0.2164	0.1989	0.0175	28			
4	0.2311	0.2021	0.0290	29			
5	0.2227	0.2063	0.0164	30	***************************************		
6				31			
7				32			
8				33			
9				34			
10				35			
11				36			***************************************
12				37			
13				38			
14		· .		39			
15				40			
16				41			
17				42		,	
18				43			
19				44			••• <u>•</u> ••••••••••••••••••••••••••••••
20				45			
21		,		46			
22				47			
23				48			
24				49			
25				50			

Calculations:



File Name Operator

Date Acquired Sample Name

Submitted by Vial Number

File Name : D:\SYSTEM4\02_09_11\770851.D

Operator : SLD

Date Acquired : 9 Feb 2011 21:35

Sample Name : COCAINE STD

Submitted by Vial Number 51 : AcquisitionMeth: DRUGS

Integrator : RTE

TIC: 770851.D Abundance 4|67 1500000 1000000 500000

Ret. Time	Area	Area %	Ratio %
4.666	1636731	100.00	100.00

File Name : D:\SYSTEM4\02 09 11\770851.D

Operator : SLD

Date Acquired : 9 Feb 2011 21:35

Sample Name : COCAINE STD

Submitted by :

Vial Number : 51 AcquisitionMeth: DRUGS Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

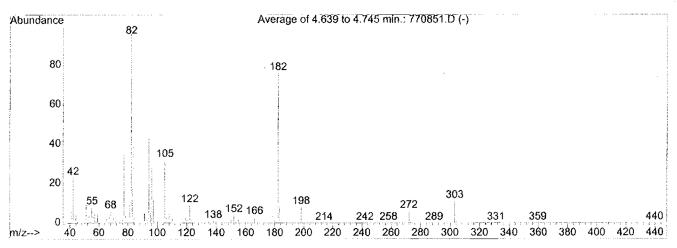
:\DATABASE\SLI.L Minimum Quality: 90

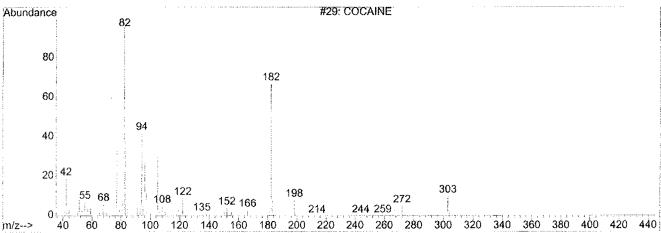
C:\DATABASE\PMW_TOX2.L

Minimum Quality: 90

C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
1	4.67	C:\DATABASE\SLI.L COCAINE	000050-36-2	99





770851.D

Wed Jan 25 11:21:05 2012

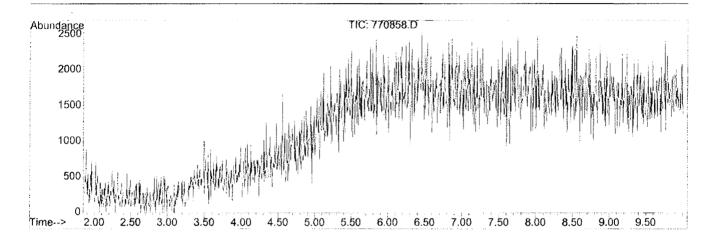
Page 2

File Name : D:\SYSTEM4\02_09_11\770858.D

Operator : SLD

Date Acquired : 9 Feb 2011 23:12

Sample Name : BLANK Submitted by : ASD Vial Number AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Ratio % Area Area

NO INTEGRATED PEAKS

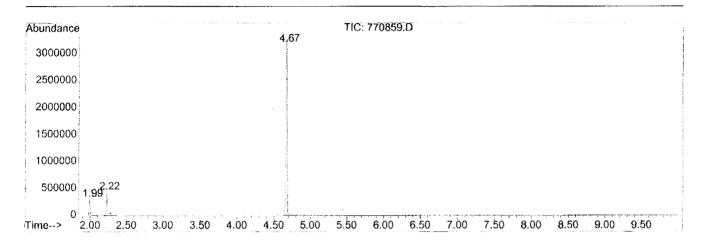
File Name : D:\SYSTEM4\02_09_11\770859.D

Operator : SLD

Date Acquired : 9 Feb 2011 23:26

Sample Name :

Submitted by : ASD
Vial Number : 59
AcquisitionMeth: DRUGS
Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
1.992 2.225 4.668	295989 372895 3563840	6.99 8.81 84.20	8.31 10.46 100.00	

File Name : D:\SYSTEM4\02 09 11\770859.D

Operator : SLD

Date Acquired : 9 Feb 2011 23:26

Sample Name :

Submitted by : ASD
Vial Number : 59
AcquisitionMeth: DRUGS
Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

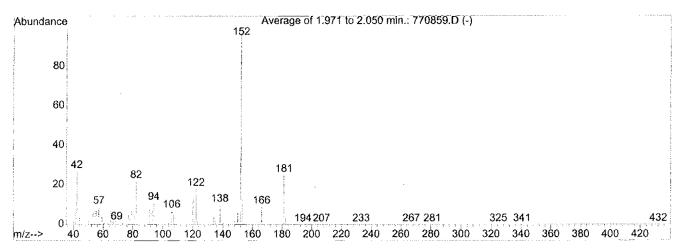
Minimum Quality: 90

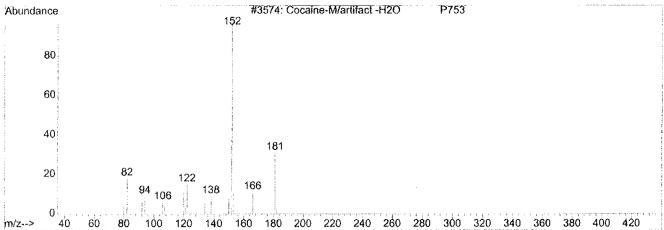
C:\DATABASE\PMW_TOX2.L

Minimum Quality: 90

C:\DATABASE\NIST98.L

	PK#	RT	Library/ID		CAS#	Qual
-	1	1.99	C:\DATABASE\PMW_TOX2.L Cocaine-M/artifact -H2O MDA-M (desmethylenyl-methyl-)	ME @	000000-00-0	96 37
			Metipranolol-M/artifact AC		000000-00-0	32





770859.D

Wed Jan 25 11:21:20 2012

Page 2

File Name : D:\SYSTEM4\02_09_11\770859.D

Operator : SLD

Date Acquired : 9 Feb 2011 23:26

Sample Name :

Submitted by : ASD
Vial Number : 59
AcquisitionMeth: DRUGS
Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

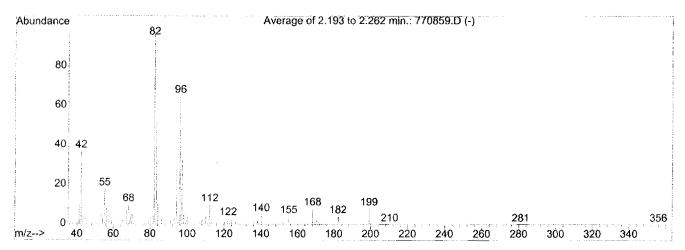
Minimum Quality: 90

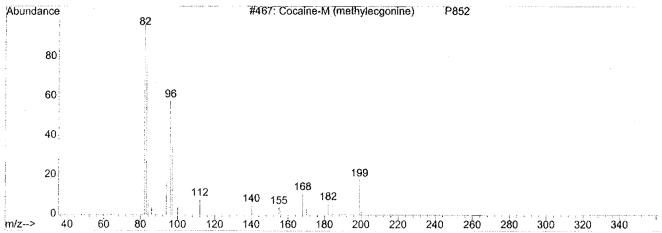
C:\DATABASE\PMW_TOX2.L

Minimum Quality: 90

C:\DATABASE\NIST98.L

PK# RT	Library/ID	CAS#	Qual
2 2.22	C:\DATABASE\PMW_TOX2.L Cocaine-M (methylecgonine)	007143-09-1	G.C
	Cocaine (methylecgonine)	007143-09-1	96 38
	Cocaine-M (methylecgonine) AC	000000-00-0	9





770859.D

Wed Jan 25 11:21:21 2012

Page 3

File Name : D:\SYSTEM4\02 09 11\770859.D

Operator : SLD

Date Acquired : 9 Feb 2011 23:26

Sample Name

Submitted by : ASD
Vial Number : 59
AcquisitionMeth: DRUGS
Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

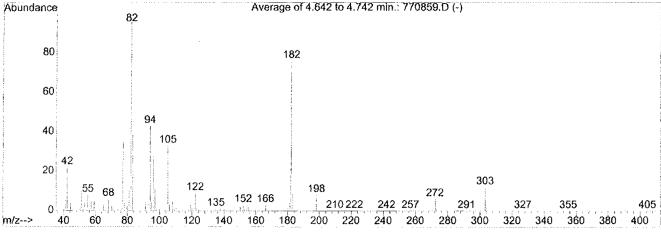
Minimum Quality: 90

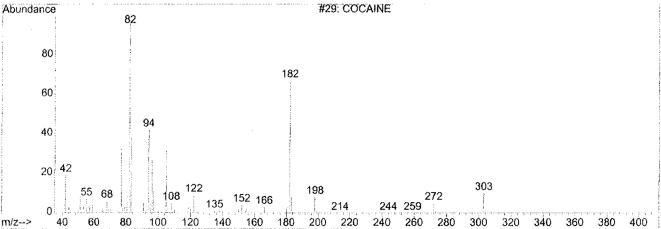
C:\DATABASE\PMW_TOX2.L

Minimum Quality: 90

C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
3	4.67	C:\DATABASE\SLI.L COCAINE	000050-36-2	99





770859.D

Wed Jan 25 11:21:22 2012

Page 4

Area Percent / Library Search Report

Information from Data File:

File Name : D:\SYSTEM4\02 09 11\770862.D

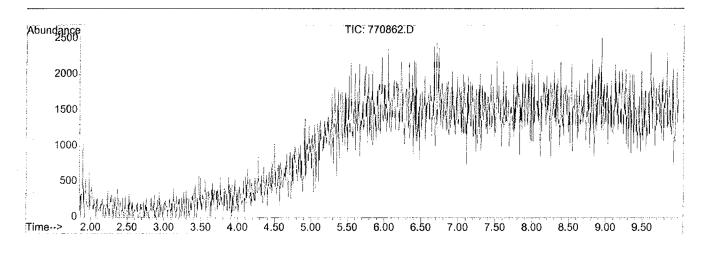
Operator : SLD

Date Acquired : 10 Feb 2011 00:07

Sample Name : BLANK

Submitted by

Vial Number 2 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area Ratio %

NO INTEGRATED PEAKS

Area Percent / Library Search Report

Information from Data File:

File Name : D:\SYSTEM4\02_09_11\770863.D
Operator : SLD

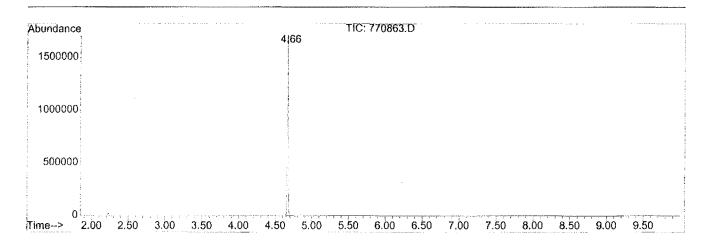
Operator : SLD

Date Acquired : 10 Feb 2011 00:21

Sample Name : COCAINE STD

Submitted by

Vial Number 51 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
4.663	1728398	100.00	100.00	

File Name : D:\SYSTEM4\02_09_11\770863.D

Operator : SLD

Date Acquired : 10 Feb 2011 00:21

Sample Name : COCAINE STD

Submitted by :

Vial Number : 51 AcquisitionMeth: DRUGS Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

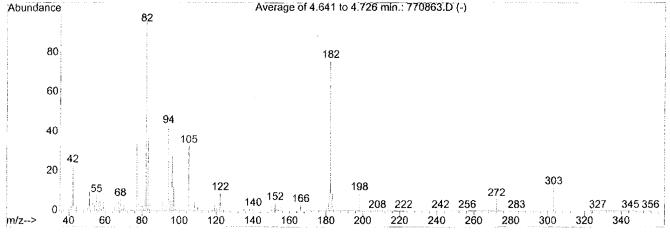
Minimum Quality: 90

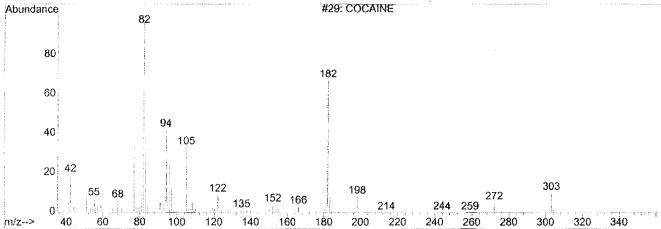
C:\DATABASE\PMW_TOX2.L

Minimum Quality: 90

C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
1	4.66	C:\DATABASE\SLI.L COCAINE	000050-36-2	99





770863.D

Wed Jan 25 11:21:34 2012

Page 2

Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q1-2011\System7\02_15_11\771904.D

: KAC Operator

Date Acquired : 15 Feb 2011 9:25

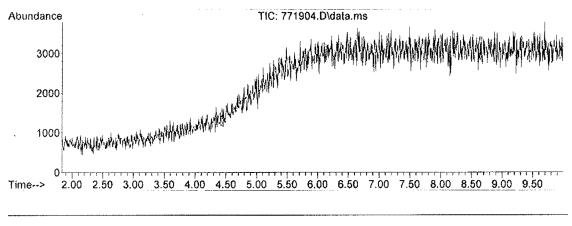
Sample Name : BLANK

Submitted by

Vial Number

AcquisitionMeth: DRUGS.M

Integrator : RTE



Ret. Time

Area

Area 왕 Ratio %

NO INTEGRATED PEAKS

File Name : F:\Q1-2011\System7\02_15_11\771905.D

: KAC Operator

Date Acquired : 15 Feb 2011 9:38

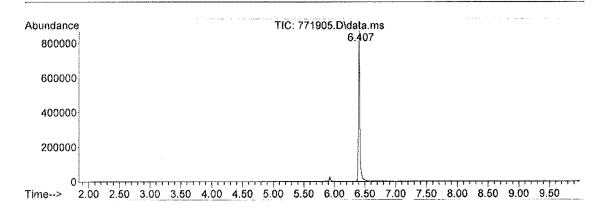
Sample Name : HEROIN STD

Submitted by

Vial Number

AcquisitionMeth: DRUGS.M

Integrator : RTE



Ret. Time	Area	Area %	Ratio %
6.407	1376028	100.00	100.00

File Name : F:\Q1-2011\System7\02_15_11\771905.D

Operator : KAC

Date Acquired : 15 Feb 2011

Sample Name : HEROIN STD

Submitted by

Vial Number

AcquisitionMeth: DRUGS.M

: RTE Integrator

C:\Database\SLI.L Search Libraries: Minimum Quality: 80

C:\Database\NIST05a.L

C:\Database\PMW TOX2.L

PK# RT CAS# Qual Library/ID

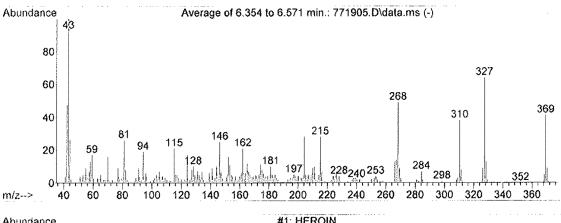
9:38

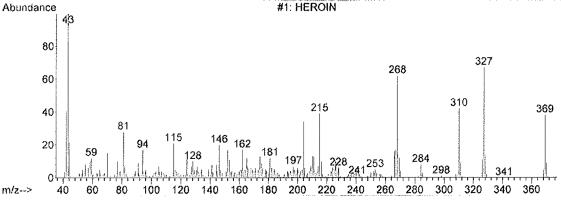
1 6.41 C:\Database\SLI.L

HEROIN

000561-27-3 99

Minimum Quality: 80



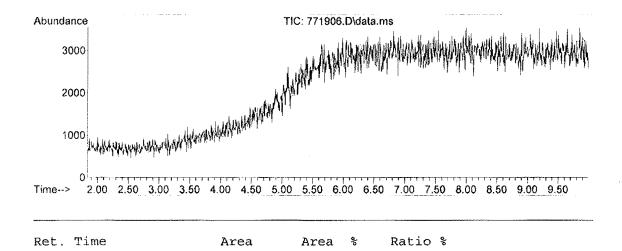


File Name : F:\Q1-2011\System7\02_15_11\771906.D

Operator : KAC

Date Acquired : 15 Feb 2011 9:51

Sample Name : BLANK
Submitted by : ASD
Vial Number : 1
AcquisitionMeth: DRUGS.M
Integrator : RTE



NO INTEGRATED PEAKS

File Name : F:\Q1-2011\System7\02_15_11\771907.D

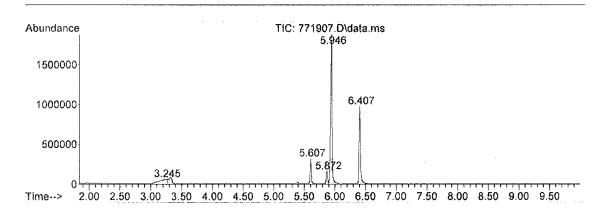
Operator : KAC

Date Acquired : 15 Feb 2011 10:03

Sample Name :

Submitted by : ASD Vial Number : 7

AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time	Area	Area %	Ratio %
3.245	512102	8.71	16.45
5.607	440354	7.49	14.15
5.872	247462	4.21	7.95
5.946	3112744	52.91	100.00
6.407	1570135	26.69	50.44

File Name : F:\Q1-2011\System7\02_15_11\771907.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:03

Sample Name :

Submitted by : ASD Vial Number : 7

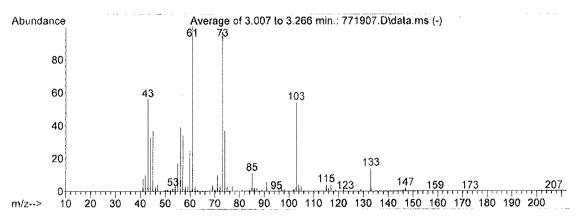
AcquisitionMeth: DRUGS.M Integrator : RTE

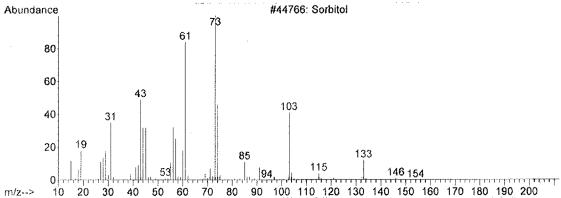
Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L Minimum Quality: 80

C:\Database\PMW_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
1	3.25	C:\Database\NIST05a.L Sorbitol	000050-70-4	87
		Sorbitol Sorbitol	000050-70-4 000050-70-4	86 80





File Name : F:\Q1-2011\System7\02_15_11\771907.D

Operator : KAC

Date Acquired 15 Feb 2011 10:03

Sample Name Submitted by ASD

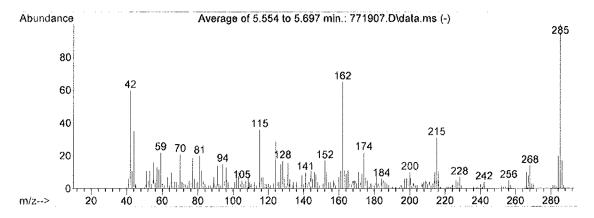
Vial Number AcquisitionMeth: DRUGS.M Integrator : RTE

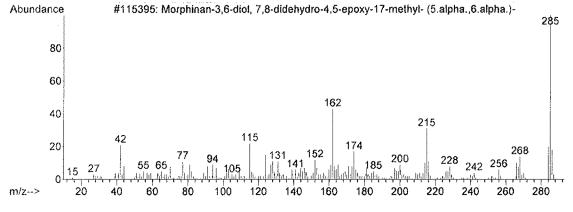
Search Libraries: Minimum Quality: 80 C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L

C:\Database\PMW TOX2.L

	PK#	RT	Library/ID	CAS#	Qual
***************************************	2	5.61	C:\Database\NIST05a.L Morphinan-3,6-diol, 7,8-didehydro-		99
			Morphinan-3,6-diol, 7,8-didehydro-	4 000057-27-2	99
			Morphinan-3,6-diol, 7,8-didehydro-	4 000057-27-2	99





: F:\Q1-2011\System7\02_15_11\771907.D File Name

Operator : KAC

Date Acquired : 15 Feb 2011 10:03

Sample Name Submitted by ASD Vial Number :

Integrator

AcquisitionMeth: DRUGS.M RTE

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 Minimum Quality: 80

1000153-00-1

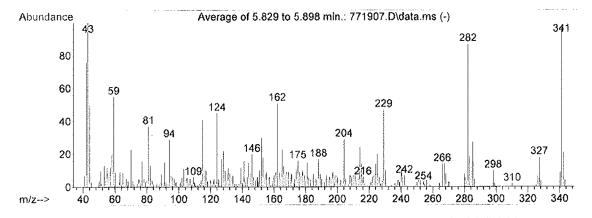
92

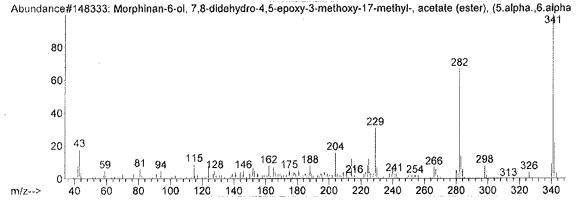
C:\Database\NIST05a.L

Morphin, 3-acetyl-

C:\Database\PMW TOX2.L

PK# RT CAS# Qual Library/ID 3 5.87 C:\Database\NIST05a.L Morphinan-6-ol, 7,8-didehydro-4,5-e 006703-27-1 Morphinan-6-ol, 7,8-didehydro-4,5-e 006703-27-1 97 97





File Name : F:\Q1-2011\System7\02_15_11\771907.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:03

Sample Name : Submitted by : ASD

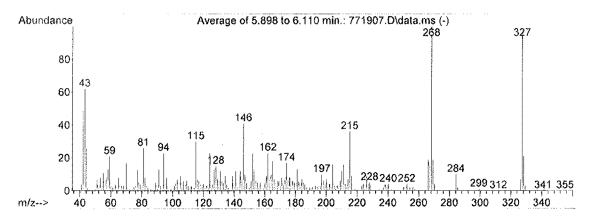
Vial Number : 7
AcquisitionMeth: DRUGS.M
Integrator : RTE

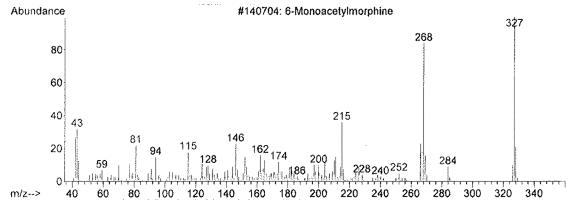
Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L

C:\Database\PMW TOX2.L

	PK#	RT	Library/ID	CAS#	Qual
******	4	5.95	C:\Database\NIST05a.L 6-Monoacetylmorphine	002784-73-8	99
			6-Monoacetylmorphine 6-Monoacetylmorphine	002784-73-8 002784-73-8	99 99





Minimum Quality: 80

File Name : F:\Q1-2011\System7\02_15_11\771907.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:03

Sample Name :

Submitted by : $\overline{\text{ASD}}$ Vial Number : 7

AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

C:\Database\SLI.L Minimum Quality: 80 C:\Database\NIST05a.L Minimum Quality: 80

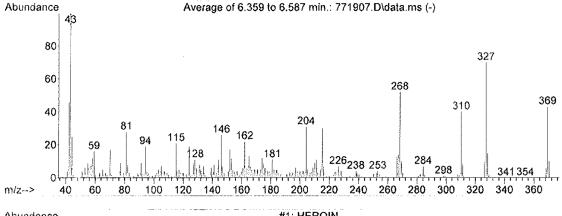
C:\Database\PMW_TOX2.L

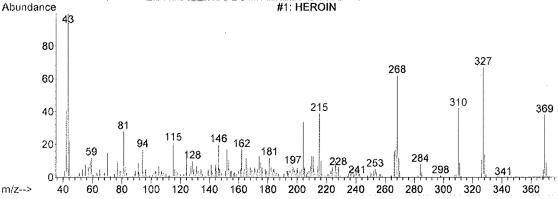
PK# RT Library/ID CAS# Qual

5 6.41 C:\Database\SLI.L

HEROIN 000561-27-3

99





File Name : F:\Q1-2011\System7\02_15_11\771908.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:16

Sample Name :

Submitted by : ASD
Vial Number : 8
AcquisitionMeth: DRUGS.M
Integrator : RTE

Abundance TIC: 771908.D\data.ms
5.946

1500000

1500000

5.612

5.867

Time--> 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 6.00 6.50 7.00 7.50 8.00 8.50 9.00 9.50

Area	Area %	Ratio %	
629037	8.12	15.08	
699390	9.03	16.76	
334629	4.32	8.02	
4172296	53.88	100.00	
1908470	24.65	45.74	
	629037 699390 334629 4172296	629037 8.12 699390 9.03 334629 4.32 4172296 53.88	629037 8.12 15.08 699390 9.03 16.76 334629 4.32 8.02 4172296 53.88 100.00

File Name : F:\Q1-2011\System7\02_15_11\771908.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:16

Sample Name : | Submitted by :

: ASD

Vial Number : 8
AcquisitionMeth: DRUGS.M
Integrator : RTE

Search Libraries:

C:\Database\SLI.L

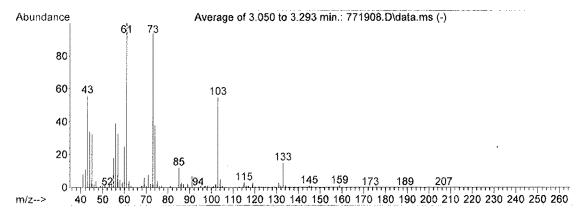
Minimum Quality: 80

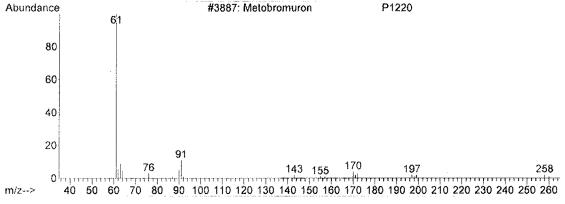
C:\Database\NIST05a.L

Minimum Quality: 80

C:\Database\PMW_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
1.	3.27	C:\Database\PMW_TOX2.L Metobromuron Myristic acid Monolinuron	003060-89-7 000544-63-8 001746-81-2	4 2 2





File Name : F:\Q1-2011\System7\02_15_11\771908.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:16

Sample Name : Submitted by :

: ASD

Vial Number : 8 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

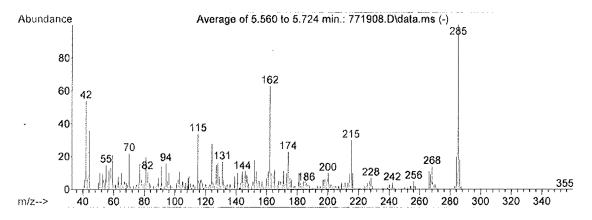
Minimum Quality: 80

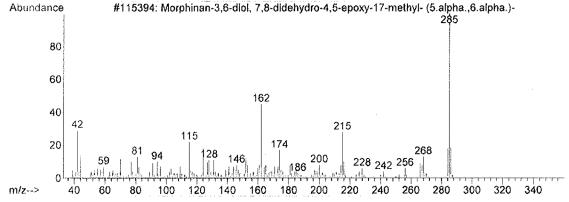
C:\Database\NIST05a.L

Minimum Quality: 80

C:\Database\PMW_TOX2.L

PK	# RT	Library	//ID		CAS#	Qual
2	5.	61 C:\Datak	pase\NIST05a.	Li		
		Morphin	nan-3,6-diol,	7,8-didehydro-4	000057-27-2	99
		Morphir	nan-3,6-diol,	7,8-didehydro-4	000057-27-2	99
		Morphin	nan-3,6-diol,	7,8-didehydro-4	000057-27-2	99





File Name : $F:\Q1-2011\System7\02_15_11\771908.D$

Operator : KAC

Date Acquired 15 Feb 2011 10:16

Sample Name

Submitted by

ASD

Vial Number 8 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries:

RT

PK#

C:\Database\SLI.L

Minimum Quality: 80

CAS#

C:\Database\NIST05a.L

C:\Database\PMW TOX2.L

Minimum Quality: 80

3 5.87 C:\Database\NIST05a.L

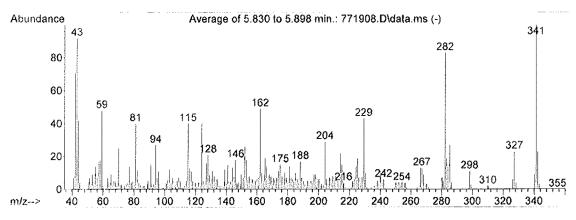
Qual

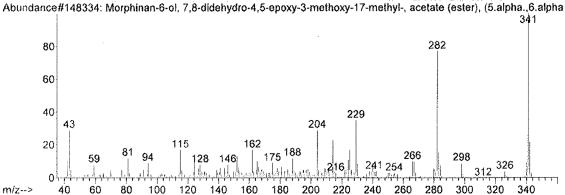
Morphinan-6-ol, 7,8-didehydro-4,5-e 006703-27-1 Morphinan-6-ol, 7,8-didehydro-4,5-e 006703-27-1 99 99

Acetylcodein

Library/ID

1000153-00-2 98





File Name : F:\Q1-2011\System7\02_15_11\771908.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:16

Sample Name :

Sumple Name :
Submitted by : ASD
Vial Number : 8

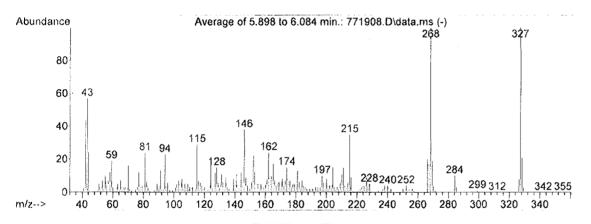
AcquisitionMeth: DRUGS.M Integrator : RTE

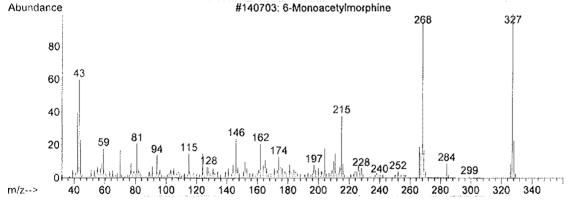
Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST05a.L

PK#	RT	Library/ID	CAS#	Qual
4	5.95	C:\Database\NIST05a.L 6-Monoacetylmorphine 6-Monoacetylmorphine 6-Monoacetylmorphine	002784-73-8 002784-73-8 002784-73-8	99 99 99





File Name : F:\Q1-2011\System7\02_15_11\771908.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:16

Sample Name : Submitted by :

: ASD : 8

Vial Number : 8
AcquisitionMeth: DRUGS.M
Integrator : RTE

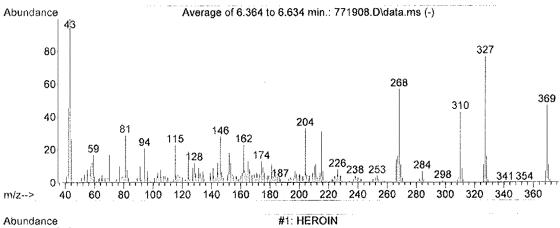
Search Libraries: C:\Database\SLI.L

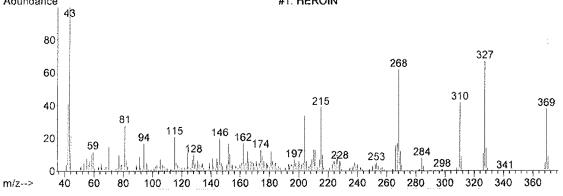
Minimum Quality: 80

C:\Database\NIST05a.L

Minimum Quality: 80

PK#	RT	Library/ID	CAS#	Qual
5	6.41	C:\Database\SLI.L		
		HEROIN	000561-27-3	99
		JWH-073	208987-48-8	2





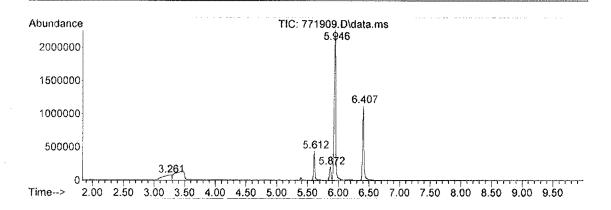
File Name : F:\Q1-2011\System7\02_15_11\771909.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:28

Sample Name :

Submitted by : ASD
Vial Number : 9
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
3.261	724023	9.61	18.01	
5.613	634422	8.42	15,78	
5.872	325760	4.32	8.10	
5.946	4020959	53.36	100.00	
6.407	1830160	24.29	45.52	

File Name : F:\Q1-2011\System7\02_15_11\771909.D

Operator : KAC

10:28 Date Acquired : 15 Feb 2011

Sample Name

Submitted by ASD Vial Number 9

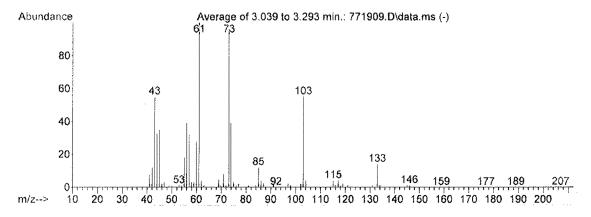
AcquisitionMeth: DRUGS.M

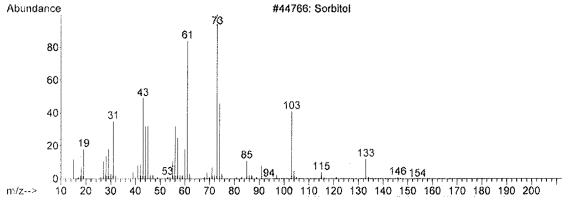
: RTE Integrator

Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L Minimum Quality: 80

 PK#	RT	Library/ID	CAS#	Qual
1	3.26	C:\Database\NIST05a.L		
		Sorbitol	000050-70-4	87
		D-Mannitol	000069-65-8	78
		Sorbitol	000050-70-4	64





File Name : F:\Q1-2011\System7\02_15_11\771909.D

Operator : KAC

Date Acquired 15 Feb 2011 10:28

Sample Name

Submitted by ASD Vial Number 9

AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries:

C:\Database\SLI.L

Minimum Quality: 80 C:\Database\NIST05a.L Minimum Quality: 80

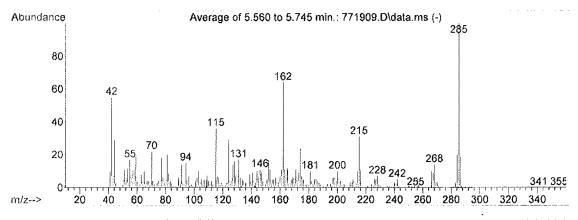
C:\Database\PMW_TOX2.L

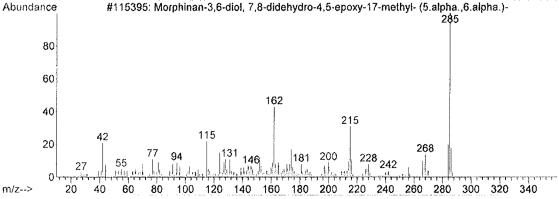
PK# RT Library/ID CAS# Qual

2 5.61 C:\Database\NIST05a.L

Morphinan-3,6-diol, 7,8-didehydro-4 000057-27-2 Morphinan-3,6-diol, 7,8-didehydro-4 000057-27-2 Morphinan-3,6-diol, 7,8-didehydro-4 000057-27-2 99 99

99





File Name : F:\Q1-2011\System7\02_15_11\771909.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:28

Sample Name :

Submitted by : ASD
Vial Number : 9
AcquisitionMeth: DRUGS.M
Integrator : RTE

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 Minimum Quality: 80

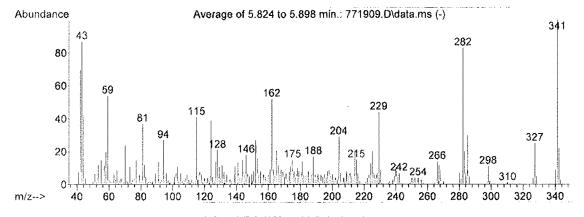
C:\Database\NIST05a.L

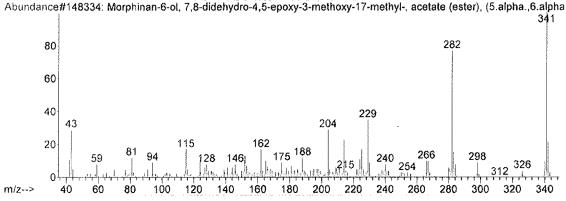
C:\Database\PMW_TOX2.L

PK# RT Library/ID CAS# Qual

3 5.87 C:\Database\NIST05a.L

Morphinan-6-ol, 7,8-didehydro-4,5-e 006703-27-1 99 Morphinan-6-ol, 7,8-didehydro-4,5-e 006703-27-1 99 Acetylcodein 1000153-00-2 95





File Name : F:\Q1-2011\System7\02_15_11\771909.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:28

Sample Name :

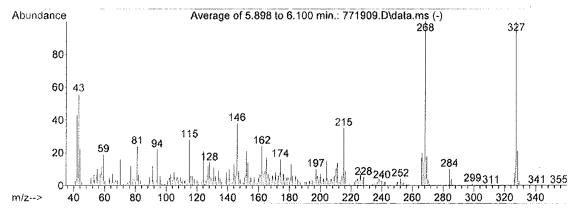
Submitted by : ASD
Vial Number : 9
AcquisitionMeth: DRUGS.M
Integrator : RTE

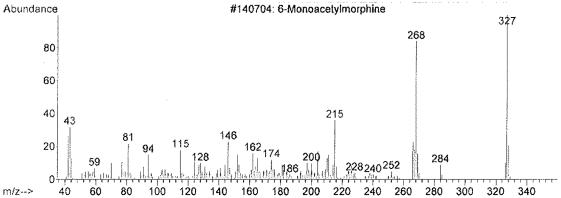
Search Libraries: C:\Database\SLI.L

C:\Database\NIST05a.L

C:\Database\PMW_TOX2.L

	PK#	RT	Library/ID	CAS#	Qual
4	5.95	C:\Database\NIST05a.L			
			6-Monoacetylmorphine 6-Monoacetylmorphine	002784-73-8 002784-73-8	99 99
			6-Monoacetylmorphine	002784-73-8	99





Minimum Quality: 80

Minimum Quality: 80

File Name : F:\Q1-2011\System7\02_15_11\771909.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:28

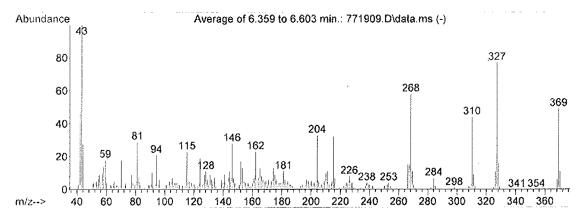
Submitted by ASI

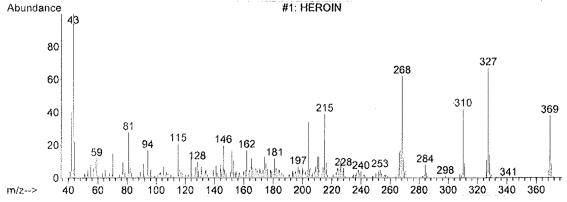
Submitted by : ASD
Vial Number : 9
AcquisitionMeth: DRUGS.M
Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L Minimum Quality: 80

PK#	RT	Library/ID	CAS#	Qual
5	6.41	C:\Database\SLI.L HEROIN JWH-073	000561-27-3 208987-48-8	99





File Name : F:\Q1-2011\System7\02_15_11\771910.D

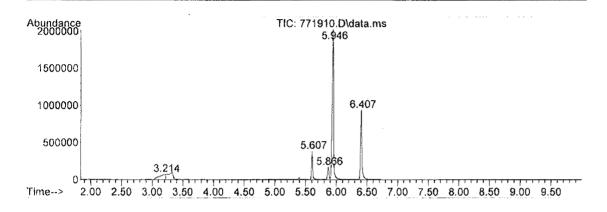
Operator : KAC

Date Acquired : 15 Feb 2011 10:41

Sample Name :

Submitted by : ASD
Vial Number : 10
AcquisitionMeth: DRUGS.M

Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
3.214	497068	7,96	14.52	
5.607	526511	8.43	15.38	
5.866	266490	4.27	7.79	
5.946	3422257	54.80	100.00	
6.407	1532774	24.54	44.79	

File Name : F:\Q1-2011\System7\02_15_11\771910.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:41

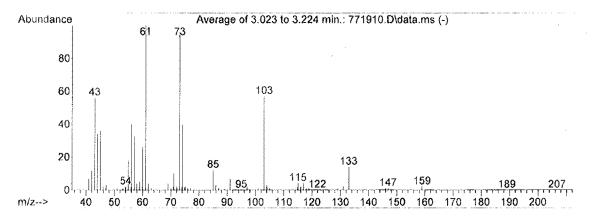
Sample Name :

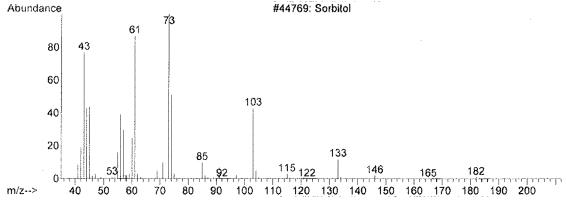
Submitted by : ASD
Vial Number : 10
AcquisitionMeth: DRUGS.M
Integrator : RTE

Search Libraries: C:\Database\SLI.L

C:\Database\SLI.L Minimum Quality: 80 C:\Database\NIST05a.L Minimum Quality: 80

 PK#	RT	Library/ID	CAS#	Qual
 1	3.21	C:\Database\NIST05a.L		
		Sorbitol	000050-70-4	80
		Sorbitol	000050-70-4	72
		Sorbitol	000050-70-4	72





File Name : F:\Q1-2011\System7\02_15_11\771910.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:41

Sample Name :

Submitted by : ASD
Vial Number : 10
AcquisitionMeth: DRUGS.M
Integrator : RTE

Search Libraries:

C:\Database\SLI.L

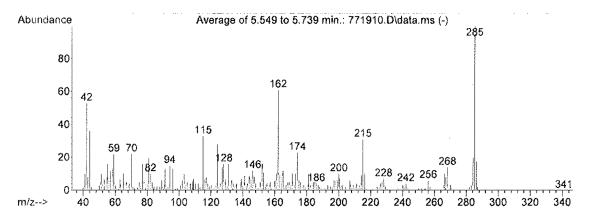
Minimum Quality: 80

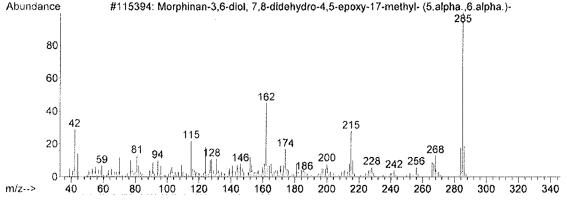
C:\Database\NIST05a.L

C:\Database\PMW_TOX2.L

Minimum Quality: 80

PK#	RT	Library/ID		CAS#	Qual
2	5.61	C:\Database\NIST05a.			na nona di mala ka a mazione ka meta deleki da ek
		Morphinan-3,6-diol,			99
		Morphinan-3,6-diol,	7,8-didehydro-4	000057-27-2	99
		Morphinan-3,6-diol,	7,8-didehydro-4	000057-27-2	99





File Name : F:\Q1-2011\System7\02_15_11\771910.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:41

Sample Name :

Sample Name : Submitted by : ASD Vial Number : 10

AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

pase\SLI.L Minimum Quality: 80 pase\NIST05a.L Minimum Quality: 80

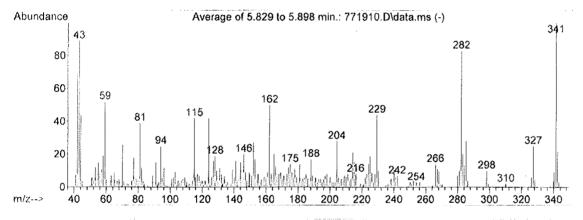
1000153-00-2

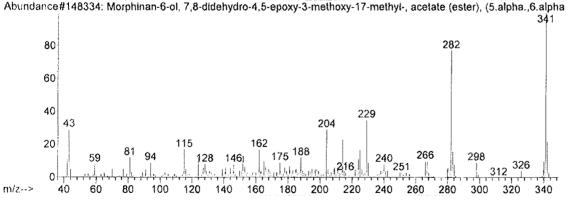
95

C:\Database\NIST05a.L

C:\Database\PMW TOX2.L

Acetylcodein





File Name : F:\Q1-2011\System7\02_15_11\771910.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:41

Sample Name :

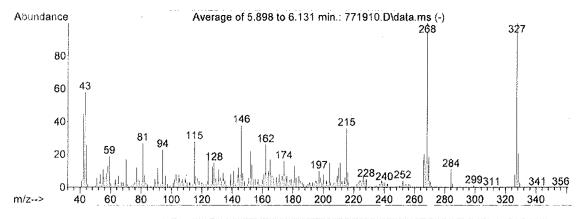
Submitted by : ASD
Vial Number : 10
AcquisitionMeth: DRUGS.M
Integrator : RTE

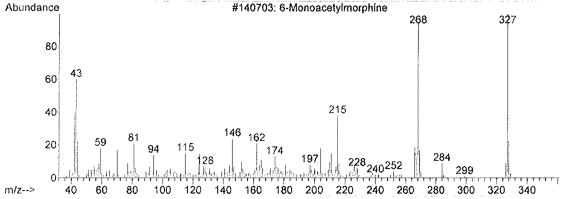
Search Libraries: C:\Database\SLI.L

C:\Database\SLI.L Minimum Quality: 80 C:\Database\NIST05a.L Minimum Quality: 80

C: \Database \NIDIUSa.L

PK#	RT	Library/ID	CAS#	Qual
4	5.95	C:\Database\NIST05a.L 6-Monoacetylmorphine 6-Monoacetylmorphine 6-Monoacetylmorphine	002784-73-8 002784-73-8 002784-73-8	99 99 99





File Name : F:\Q1-2011\System7\02 15 11\771910.D

Operator : KAC

Date Acquired 15 Feb 2011 10:41

Sample Name

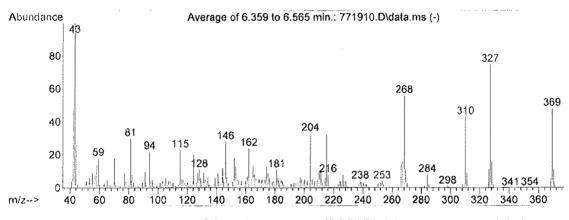
Submitted by ASD Vial Number 10 AcquisitionMeth: DRUGS.M Integrator : RTE

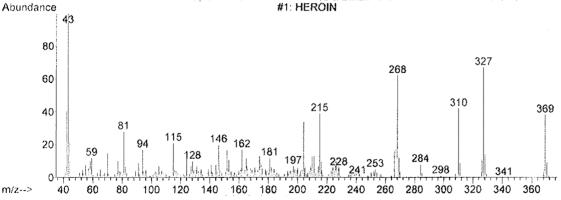
Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 C:\Database\NIST05a.L Minimum Quality: 80

C:\Database\PMW TOX2.L

PK# RT Library/ID CAS# Qual 5 6.41 C:\Database\SLI.L HEROIN 000561-27-3 99 JWH-073 208987-48-8 2





File Name : F:\Q1-2011\System7\02_15_11\771911.D

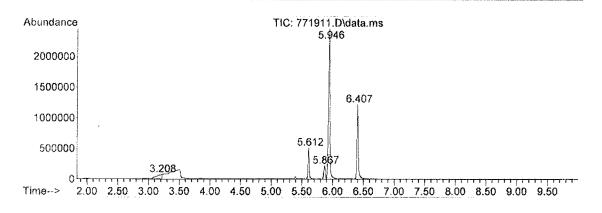
Operator : KAC

Date Acquired : 15 Feb 2011 10:54

Sample Name :

Submitted by : ASD Vial Number : 11 AcquisitionMeth: DRUGS.M

Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
3.208	404964	5.32	9.62	
5.612	713169	9.37	16.94	
5.867	351629	4.62	8.35	
5.946	4210108	55.33	100.00	
6.407	1928628	25.35	45.81	

File Name : F:\Q1-2011\System7\02_15_11\771911.D

: KAC Operator

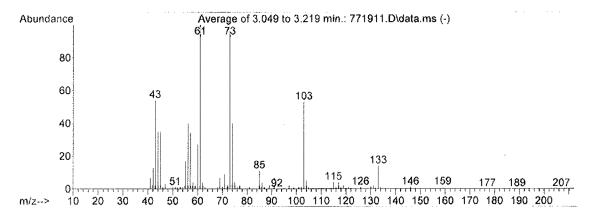
Date Acquired : 15 Feb 2011 10:54

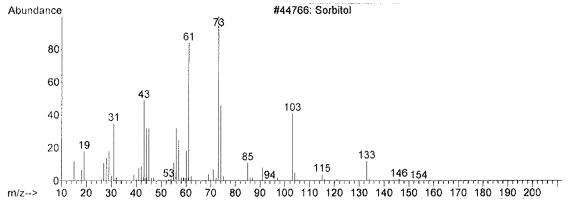
Sample Name Submitted by : ASD Vial Number 11 AcquisitionMeth: DRUGS.M : RTE Integrator

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 C:\Database\NIST05a.L Minimum Quality: 80

PK#	RT	Library/ID	CAS#	Qual
1.	3.21	C:\Database\NIST05a.L		
		Sorbitol	000050-70-4	87
		Sorbitol	000050-70-4	86
		D-Mannitol	000069-65-8	83





File Name : F:\Q1-2011\System7\02 15 11\771911.D

Operator KAC

Integrator

Date Acquired 15 Feb 2011 10:54

: RTE

Sample Name Submitted by ASD Vial Number 11 AcquisitionMeth: DRUGS.M

Search Libraries: C:\Database\SLI.L

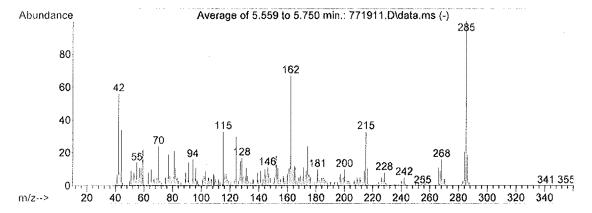
Minimum Quality: 80 Minimum Quality: 80 C:\Database\NIST05a.L

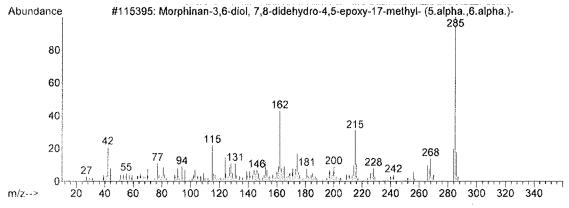
C:\Database\PMW_TOX2.L

PK# RT Library/ID CAS# Qual

2 5.61 C:\Database\NIST05a.L

Morphinan-3,6-diol, 7,8-didehydro-4 000057-27-2 99 Morphinan-3,6-diol, 7,8-didehydro-4 000057-27-2 99 Morphinan-3,6-diol, 7,8-didehydro-4 000057-27-2 99





File Name : F:\Q1-2011\System7\02_15_11\771911.D

Operator : KAC

Date Acquired 15 Feb 2011 10:54

Sample Name Submitted by ASD

Vial Number 11 AcquisitionMeth: DRUGS.M Integrator RTE

Search Libraries: C:\Database\SLI.L

Acetylcodein

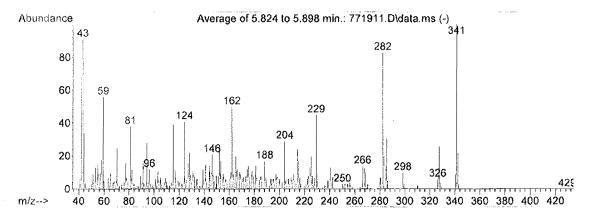
Minimum Quality: 80 C:\Database\NIST05a.L Minimum Quality: 80

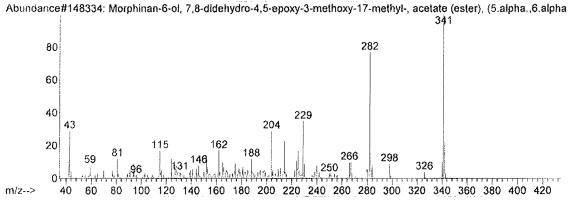
1000153-00-2

95

C:\Database\PMW TOX2.L

PK# RTCAS# Library/ID Qual 3 5.87 C:\Database\NIST05a.L Morphinan-6-ol, 7,8-didehydro-4,5-e 006703-27-1 Morphinan-6-ol, 7,8-didehydro-4,5-e 006703-27-1 99 96





File Name : F:\Q1-2011\System7\02_15_11\771911.D

Operator : KAC

15 Feb 2011 10:54

Date Acquired : Sample Name :

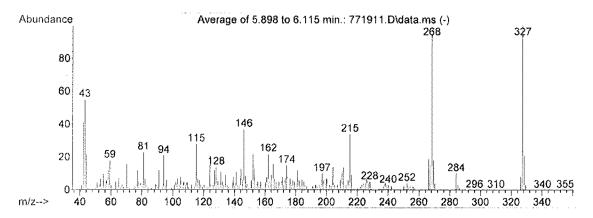
Sample Name : Submitted by : ASD Vial Number : 11

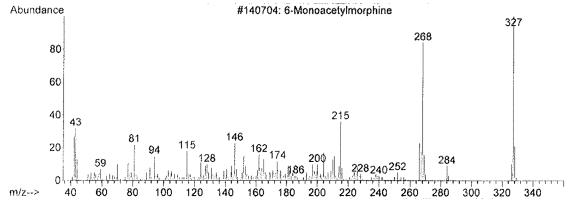
AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

C:\Database\SLI.L Minimum Quality: 80 C:\Database\NIST05a.L Minimum Quality: 80

PK#	RT	Library/ID	CAS#	Qual
4	5.95	C:\Database\NIST05a.L 6-Monoacetylmorphine	002784-73-8 99	
		6-Monoacetylmorphine 6-Monoacetylmorphine	002784-73-8 002784-73-8 002784-73-8	99 99





File Name : F:\Q1-2011\System7\02 15 11\771911.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:54

JWH-073

Sample Name :
Submitted by : ASD
Vial Number : 11
AcquisitionMeth: DRUGS.M

Integrator : RTE

Search Libraries:

C:\Database\SLI.L

Minimum Quality: 80 Minimum Quality: 80

208987-48-8

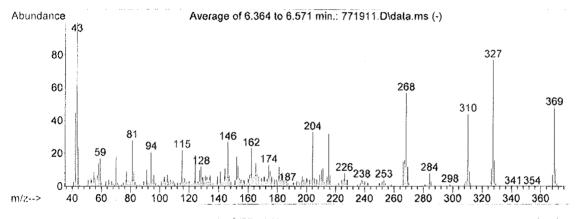
2

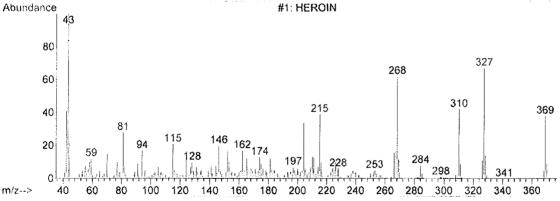
C:\Database\NIST05a.L

C:\Database\PMW_TOX2.L

PK# RT Library/ID CAS# Qual

5 6.41 C:\Database\SLI.L
HEROIN 000561-27-3 99





File Name : F:\Q1-2011\System7\02_15_11\771922.D

Operator : KAC

Date Acquired : 15 Feb 2011 13:12

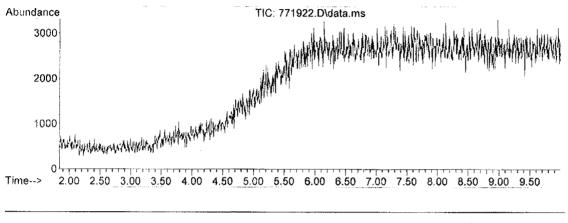
Sample Name : BLANK

Submitted by

Vial Number :

AcquisitionMeth: DRUGS.M

Integrator : RTE



Ret. Time

Area

Area %

Ratio %

NO INTEGRATED PEAKS

File Name : F:\Q1-2011\System7\02_15_11\771923.D

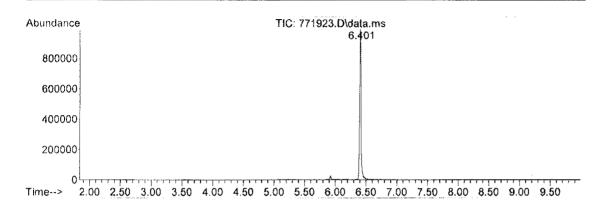
Operator : KAC

Date Acquired : 15 Feb 2011 13:25

Sample Name : HEROIN STD

Submitted by :

Vial Number : 23 AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time	Area	Area %	Ratio %
6.401	1598308	100.00	100.00

File Name : F:\Q1-2011\System7\02_15_11\771923.D

Operator : KAC

Date Acquired : 15 Feb 2011 13:25

Sample Name : HEROIN STD

Submitted by :

Vial Number : 23 AcquisitionMeth: DRUGS.M

Integrator : RTE

Search Libraries: C:\Database\SLI.L

C:\Database\NIST05a.L

C:\Database\PMW TOX2.L

PK# RT Library/ID CAS# Qual

1 6.40 C:\Database\SLI.L

HEROIN

000561-27-3 99

Minimum Quality: 80

Minimum Quality: 80

